

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): A method of broadcasting television programming including:

generating an analog video signal ~~to provide a digitally encrypted audio signal;~~
digitally encrypting an audio signal to provide a digitally encrypted audio signal;
modulating a carrier with said digitally encrypted audio signal and said analog video signal; and

C1 broadcasting said audio and video signals, wherein said digitally encrypted audio signal is broadcast using a plurality of overlapping subcarriers ~~using a cyclic prefix as a guard interval while spacing subcarriers adjacent to corresponding frequencies.~~

Claim 2 (Original): The method of claim 1 wherein modulating a carrier with said digitally encrypted audio signal includes using orthogonal frequency division multiplexing to form symbols.

Claim 3 (Original): The method of claim 2 including using an inverse Fourier transform to convert a frequency domain signal back to the time domain.

Claim 4 (Original): The method of claim 3 including providing a guard interval with an orthogonal frequency division multiplexing symbol.

Claim 5 (Original): The method of claim 4 including providing said guard interval as a cyclic prefix.

Claim 6 (Original): The method of claim 4 including setting the guard interval to a time equal to the worst case multi-path delay.

Claim 7 (Original): The method of claim 6 including setting the multi-path delay time about 250 microseconds.

Claim 8 (Original): The method of claim 7 including setting the guard interval to less than about one quarter of the symbol duration and setting the symbol time to about one millisecond.

Claim 9 (Original): The method of claim 1 wherein modulating a carrier includes using a conventional FM subcarrier and modulating said carrier with said audio signal.

Claim 10 (Original): The method of claim 7 including synthesizing a carrier to form a frequency modulated subcarrier.

Claim 11 (Original): The method of claim 1 wherein generating an analog video signal includes generating an analog video signal with a graphical overlay pattern.

01
Claim 12 (Currently Amended): A television transmitter comprising:
a graphics pattern generator that provides a graphics pattern to overlay on ~~for~~ an analog video signal to form an obscured video signal;
an analog-to-digital converter coupled to said graphics pattern generator to receive an analog audio signal;
a digital encryption stage coupled to said analog-to-digital converter to generate a digital audio signal;
a modulator coupled to said digital encryption stage to generate a modulated audio signal;
and
a broadcaster to transmit the obscured video signal and the modulated audio signal ~~use a cyclic prefix as a guard interval while spacing subcarriers adjacent to corresponding frequencies.~~

Claim 13 (Currently Amended): The transmitter of claim 12 wherein said modulator is adapted to use ~~uses~~ orthogonal frequency division multiplexing.

Claim 14 (Original): The transmitter of claim 13 further including an inverse Fourier transform unit coupled to said modulator.

Claim 15 (Previously Presented): The transmitter of claim 14 including a digital-to-analog converter coupled to said inverse Fourier transform unit.

Claim 16 (Cancel)

Claim 17 (Currently Amended): The transmitter of claim 13 including a modulator ~~that modulates to modulate~~ a carrier with said analog obscured video signal ~~with said overlaid graphics pattern~~.

Claim 18 (Currently Amended): A television receiver comprising:
a video detector to separate a received television signal into audio and video components;
a device coupled to said video detector to remove a ~~the~~ graphics overlay from an analog video signal;

[[a]] an analog-to-digital converter coupled to said audio signal;
a decryption stage coupled to said analog-to-digital converter; and
a demodulator coupled to said decryption stage to demodulate a carrier using a cyclic prefix as a guard interval ~~while spacing subcarriers adjacent to corresponding frequencies~~.

C1 Claim 19 (Currently Amended): The receiver of claim 18 wherein said demodulator is adapted to demodulate ~~demodulates~~ using orthogonal frequency division multiplexing.

Claim 20 (Original): The receiver of claim 18 further including a Fourier transform unit coupled to said demodulator.

Claim 21 (Previously Presented): The receiver of claim 20 including an digital-to-analog converter coupled to said Fourier transform unit.

Claim 22 (New): The method of claim 5, wherein said cyclic prefix comprises a portion of a transmitted symbol.

Claim 23 (New): The method of claim 22, wherein said portion comprises a tail of said transmitted symbol.

C2 Claim 24 (New): The transmitter of claim 12, wherein the modulator is adapted to insert a cyclic prefix onto symbols of said modulated audio signal.

Claim 25 (New): The transmitter of claim 24, wherein said cyclic prefix comprises a portion of said symbols.

Claim 26 (New): The receiver of claim 18, wherein said guard interval comprises a portion of a received symbol.
